Form D-559

# PRECISION MASTER

## AUTOMOBILE WHEEL BALANCER

- Accurate, Dependable, Fast, Simple to Operate
- Balance Hub, Drum and Wheel in One Operation
- No Maintenance Costs . . . Five Year Guarantee
- Balances — Passenger Car • Foreign Car
- Pickup and Delivery Truck Wheels

NET PRICE

$129.50

COMPLETE

For sale by automotive parts and equipment wholesalers only!

**PRECISION EQUIPMENT COMPANY, INC.**

630 HAINES AVE., N.W. — P. O. BOX 1397 — ALBUQUERQUE, NEW MEXICO

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The Dial Indicator shown at right is a very accurate and speedy method used to determine exact amount in ounces of weights needed also exact location of weights for proper balancing of wheel. It is calibrated in ¼ Ounces.

This Dial Indicator is a Precision and delicate part of the Precision Master Balancer. Keep it Clean and do not drop.

It is not necessary to have Precision Master on an exact level floor as the Dial and Balancing unit will seek its own level.

## IMPORTANCE OF STATIC BALANCE

Static balance is by far the most critical and important thing with which you have to be concerned, because nearly all balance problems with respect to wheels and tires are directly due to static out-of-balance. Static out of balance creates "up and down" bounce in a car, rapidly causing the tires to cup and wear unevenly, and creating a continuous wearing of the front end and steering parts.

The Precision Master will give you accurate balance. Resulting in the most important factor to you, **Customer Satisfaction.**

## DYNAMIC BALANCE

Dynamic balance is the least important factor in the balance of automobile wheels. Theoretically a wheel and tire that are dynamically out of balance will wobble from side to side when in motion. In the great majority of cases where there is a dynamic out of balance, such dynamic balance is held in check and will not create a wobble or shimmy in the car because the wheel is mounted to the car so solidly that it cannot move from side to side.

In a few cases where there is real dynamic trouble the chances are that the problem is not one of balance, but one of repairs. Such condition is due to one of the following reasons: a bent or crooked wheel, badly worn bearings, improper alignment of wheels: excessive wear in the steering system and front end. In such cases it is useless to try to correct the situation by balancing the wheels. The only solution is to make the necessary repairs.

We do not wish to underestimate dynamic balance because it is of extreme importance in its application to some industrial and scientific uses. However, to state that dynamic balance is a matter of major concern in automobile wheels is to stretch the issue way out of proportion to the actual facts.

# INSTRUCTIONS FOR

## ASSEMBLING YOUR PRECISION MASTER WHEEL BALANCER

**CONTENTS OF CARTON:**

One Shaft
One Dial Indicator Plate
One Cone Assembly with Bubble
One Base
Two Nuts

**STEP NO. 1:**

Screw nut on shaft all the way by hand; insert shaft in Base, screw second nut on shaft underside of base, both nuts to be screwed snug by hand. Place on floor, tighten upper nut with wrench holding shaft by hand. **(Do not put in Vise)**

**STEP NO. 2:**

Fill small recessed reservoir at top of shaft with SAE 20 motor oil. This should be kept full of oil at all times. Place Cone assembly on Shaft.

**CARE OF YOUR PRECISION MASTER WHEEL BALANCER**

Please see that the Cone assembly is always clean and free of dirt or gravel, A small piece of hard grease or gravel could throw the accuracy of your balancer off.

Do not drop the Dial Indicator or Cone assembly, these are precision pieces of your Precision Master Balancer and if given normal good care, will serve you long and well.

There are no wearing parts to your Precision Master Balancer and no adjustments necessary. It is Guaranteed for five years and with normal good housekeeping it should serve you for many years.

Thank you for buying this fine piece of equipment, we wish you success in pleasing your customers and making good profits for a long time to come. If at any time you feel you need additional information on the care of your Precision Master Balance, please feel free to contact the Factory direct, we assure you it will be our pleasure to be of service.

There is included with your Precision Master Balancer a large paper window sign which will attract attention of the motorist and if displayed will result in many wheel balancing jobs.

See Reverse Side—

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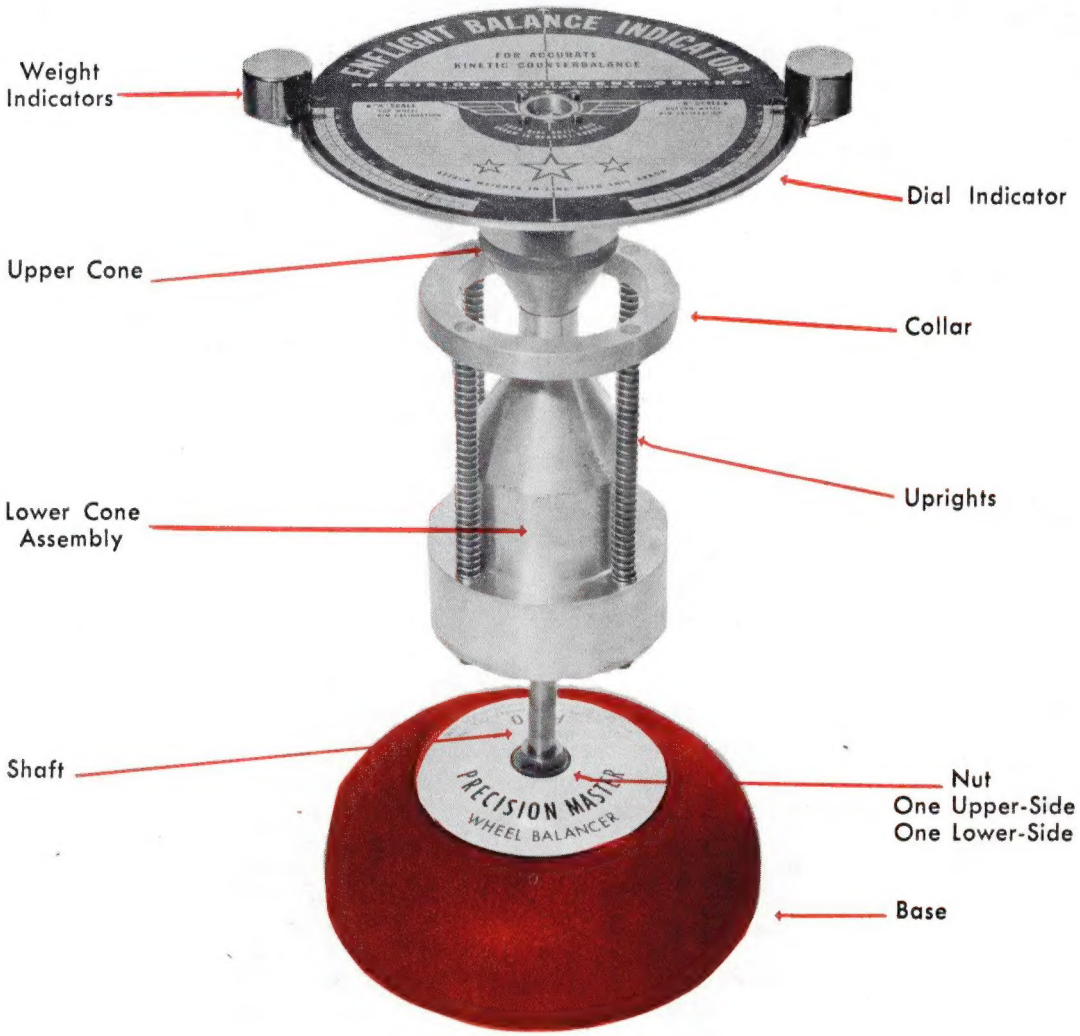
ENCLIGHT BALANCE INDICATOR
FOR ACCURATE KINETIC COUNTERBALANCE
PRECISION MASTER
WHEEL BALANCER
Weight Indicators
Dial Indicator
Upper Cone
Collar
Uprights
Lower Cone Assembly
Shaft
Nut
One Upper-Side
One Lower-Side
Base

# Instructions For Use of Precision Master Wheel Balancer

**STEP #1:**

**Front Wheels: Important to Balance complete unit.**

Remove wheel, hub and drum from car as a unit, from the Hub remove Inner and outer bearings and grease retainer. Except on such cars as Buick, etc., using Ball bearings in front wheels, in these cases leave inner bearing and grease retainer in hub then balance.

**Rear Wheels:**

Remove only the wheels, it is never necessary to remove the complete Drum assembly for balancing.

**STEP #2:**

Push collar of Cone assembly of Balancer all the way down. Place small pin in hole found in one of the uprights, thus locking the collar in place. This is of course necessary to allow Hub and Drum to rest on lower cone of the balancer. (Rear wheels or wheels without Hub assembly, remove pin and allow collar to return to full top position) Place wheel assembly on Balancer, centering unit with upper cone. Be sure the Upper Cone is all the way in place and tight, this applies in all cases. The cones should always be free from dirt or hard pieces of grease.

**STEP #3.**

Place Dial Indicator on Stem of Balancer, watch the Bubble and point Red Star Arrow to the lightest point of tire. Move Weight Indicators equally until Bubble is in center of Circle. If Indicator, for an example shows one (1) ounce on each side, the wheel is out two (2) ounces. Place one (1) 1 Ounce weight on out side of tire and one (1) 1Ounce weight on inside of tire. Be sure weights line up outside and inside. If Bubble is to the right or left of the circle, hold tire, move Indicator to right or left until Bubble is centered. This will show exact amount of weights needed and also exact location to position weights for attaching to wheel. Your Tire is now perfectly balanced, it is that simple. It is not necessary to re-check provided the Instructions above have been followed completely.

WHEELS SHOULD BE BALANCED ON AN AVERAGE OF EACH FIVE THOUSAND MILES OF DRIVING. THIS IS RECOMMENDED IN ORDER TO COMPENSATE FOR WEAR IN TIRES.

See Reverse Side—

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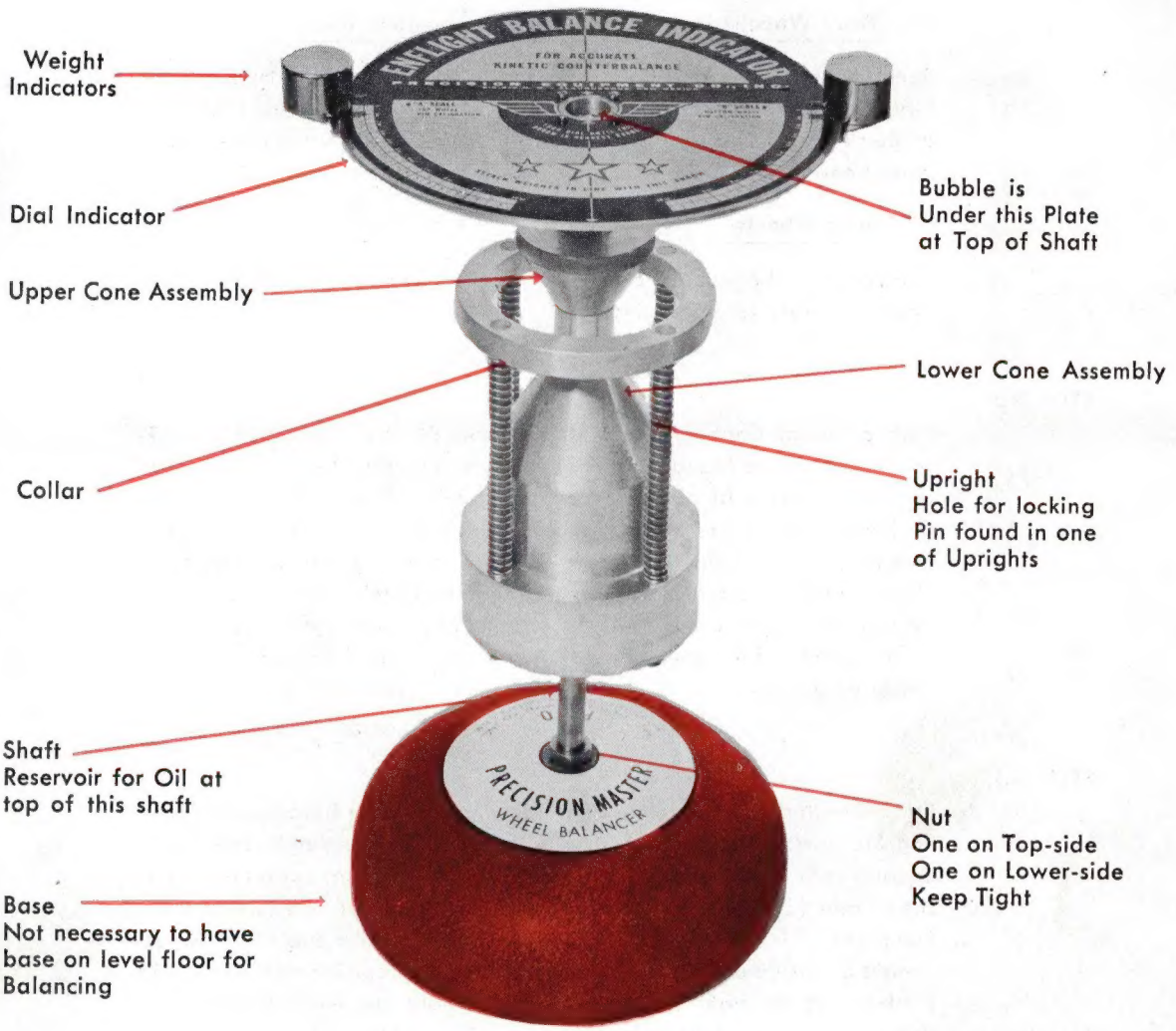
Weight Indicators
Dial Indicator
Upper Cone Assembly
Collar
Shaft
Reservoir for Oil at top of this shaft
Base
Not necessary to have base on level floor for Balancing
Bubble is Under this Plate at Top of Shaft
Lower Cone Assembly
Upright
Hole for locking Pin found in one of Uprights
Nut
One on Top-side
One on Lower-side
Keep Tight
PRECISION MASTER
WHEEL BALANCER